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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,603	11/28/2000	A. J. Paul Carew	066303.0163	7656

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Baker Botts L.L.P.  
2001 Ross Avenue  
Dallas, TX 75201-2980

EXAMINER

MEHRA, INDER P

ART UNIT PAPER NUMBER

2666

DATE MAILED: 06/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/724,603

Applicant(s)

CAREW ET AL.

Examiner

Inder P Mehra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-20, 22-24 and 28-47 is/are rejected.
- 7) ☒ Claim(s) 9, 21 and 25-27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 15. 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is in response to RCE and response dated 4/3/04 which has been fully considered and made of record. Based on this amendment, Claims 1-47 are now pending.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS), which is duplicate copy of IDS dated 1/3/01 (paper # 2), submitted on 4/30/04 was filed on 4/3/04. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 13-16, 28-31 and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Focsaneanu et al** (US Patent No. 5,610,910), hereinafter, Focsaneanu; in view of **Chao et al** (US Patent No. 5,050,164), hereinafter Chao, and, further, in view of **Gerszberg et al** (US Patent No. 6,546,016), hereinafter, Gerszberg..

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For claims 1,13, 28 and 38, Focsaneanu discloses a gateway (access module 208) for communicating telecommunication information, refer to fig. 7, refer to col. 4 lines 40-67; comprising:

(one or more packetization (extracting information content, determining the protocol, routing and address refer to col. 5 line 1-12) modules operable to receive first data packets from broadband network using a first data communications protocol and to extract first data communications protocol ---first subscriber---second data packets from a second broadband network using a second data communication protocol---second data packets), refer to col. 6 line 53-col. 7 line 50;

step of extracting information content (packetization) to determine required services---between CPE and the communication network; determining appropriate routing; (one or more telecommunication interface modules operable to communicate the first telecommunication information to a telecommunication network using a first telecommunication interface associated with the first subscriber-----second subscriber), refer to col. 4 lines 40 –col. 5 line 12.

Focsaneanu discloses a memory operable to store subscriber profiles---telecommunication interface, **as recited by claim 28**, (an access module (gateway), further, includes a storage (memory) for storing information concerning user profile (subscriber profile), refer to col. 5, lines 2-6; database (memory), refer to col. 8 lines 14-16;

Focsaneanu discloses packetized data traffic and packetized voice, refer to col. 11 lines 1-1-15, ( a packetization module -----information associated with a subscriber (user profile, col. 11 line 2) from the data packets using a data communication protocol (ATM and Frame Relay, col. 11 line 6)-----subscriber, as recited by claim 28);

Focsaneanu discloses a telecommunication interface -----subscriber, as recited by **claim 28**; refer to col. 10 line 46-col. 11 line 6.

Focsaneanu does not disclose expressly, “using a first data communication protocol”, and “ wherein the first and second broadband networks include any of digital subscriber line, cable and wireless platform”

Chao discloses, a *unique protocol* capable of handling services with multiple priorities (unique protocol is unique to each subscriber’s profile as stored / desired”, refer to col. 17 lines 5-7;

Gerszberg discloses, ““ wherein the first and second broadband networks include any of digital subscriber line, cable and wireless platform”, refer to figs. 1A and 1C, col. 2 lines 57-67, col. 1 lines 25-35;

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the protocol unique to the subscriber as prescribed in subscriber’s profile, as taught by Chao and gateway connected with cable, as taught by Gerszberg. The use of unique protocol in broadband network is advantageous to CPE. The suggestion/motivation to do so would have been to provide desired characteristics for customer premises network which uses broadband to deliver all services.

For claims 2-3, 14-15, 29-30, and 39-40, Focsaneanu discloses packetized data traffic and packetized voice, refer to col. 11 lines 1-15, ( a packetization module -----identify the subscriber (identify a service request, refer to col. 8 line 1-11)---- subscriber----packets) (user profile, col. 11 line 2).

For claims 4, 16, 31 and 41, Focsaneanu discloses, “the subscriber identifier is a name address, or telephone number, refer to col. 8 lines 16-22, 30, col. 13 lines 62-67.

5. Claims 5-7, 17-19, 32-33, and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Focsaneanu et al**, hereinafter, Focsaneanu; in view of **Chao et al**, hereinafter Chao, **Gerszberg et al**, hereinafter, Gerszberg. as applied to claims 1, 13, 28 and 38 above; further in view of Gerszberg **and Hortenslus, Peter Dirk, Lumelsky, Leon, and Narasimhan, Anand** (EP 0789470), hereinafter, Hortenslus.

For claims 5-7, 17-19, 32-33, and 42-43, Focsaneanu, Chao and Gerszberg disclose all the features and limitations of the subject matter of claims 5, 17, 32 and 42 (including compression techniques at gateway, refer to col. 7 line 3 of Focsaneanu; and memory operable to store first subscriber profile---compression algorithm---, as recited by claims 6, 18, 32 and 42, database for packet assembly and disassembly, refer to col. 8 lines 22-24 and col. 7 lines 3 and col. 11 lines 15-21), with the exception of the following limitation: “compression modules operable to de-compress the first telecommunication information-----subscriber”

Hortenslus discloses, ““compression modules operable to de-compress the first telecommunication information-----subscriber”, refer to col. 6 lines 37-50;

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the compression and de-compression technique from the algorithm unique to the subscriber as prescribed in subscriber’s profile, as taught by Hortenslus. The use of unique technique in broadband network is advantageous to CPE. The suggestion/motivation to do so

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would have been to provide desired characteristics for customer premises network which uses broadband to deliver all services and also to save bandwidth.

6. Claims 8, 10, 12, 20, 22, 24, 34-35, 37, 44-45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Focsaneanu et al**, hereinafter, Focsaneanu; in view of **Chao et al**, hereinafter Chao, and Gerszberg, as applied to claims 1, 13, 28 and 38 above; further in view of **Pounds et al** (US Patent No. 6,560,222), hereinafter, Pounds.

For claims 8, 10, 12, 20, 22, 24, 34-35, 37, 44-45, and 47, both Focsaneanu and Chao disclose all the features and limitations of claims 8, 20, 34 and 44, with the exception of, “a management module operable to assign at least *one time slot of a time division multiplexing (TDM) bus* to communicate the first telecommunication information----“, as recited by claims 8, 20, 34 and 44; “*a data packet bus ----first data packets to packetization module--- and TDM bus----telecommunication information---*“, as recited by claims 10, 22, 35 and 45; and “*echo cancellation modules ----on the first telecommunication interface*“, as recited by claims 12, 24, 37 and 47.

Pounds discloses “a management module operable to assign at least *one time slot of a time division multiplexing (TDM) bus* to communicate the first telecommunication information---“; refer to col. 8 lines 60-63; ““*a data packet bus ----first data packets to packetization module--- and TDM bus----telecommunication information---*“, refer to col. 9 lines 50-53; and “*echo cancellation modules ----on the first telecommunication interface*, refer to col.8 lines 2.

Pounds does not disclose expressly whether echo cancellation be used in the second telecommunication information

It would have been obvious to a person of ordinary skill in the art at the time of the invention to assign at least *one time slot of a time division multiplexing (TDM) bus and echo cancellation* to communicate the first telecommunication information. The capability of using time slots of a time division bus is provided by combining it in access module 234 of fig. 8. The suggestion/motivation to do so would have been to provide desired characteristics of voice data signals for customer premises network which uses broadband to deliver all services and also to save bandwidth.

7. Claims 11, 23, 36, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Focsaneanu et al**, hereinafter, Focsaneanu; in view of **Chao et al**, hereinafter Chao, and Gerszberg, as applied to claims 11, 23, 36 and 46 above; further in view of **Lyles et al** (US Patent no. 6,563,829), hereinafter, Lyles.

For claims 11, 23, 36, and 46, both Focsaneanu, Chao and Gerszberg, disclose all the features and limitations of claims 11, 23, 36, and 46 and, with the exception of the limitation, *“IEEE 802.6 bus operable to communicate the first data packets----“*;

Lyles discloses, *“IEEE 802.6 bus operable to communicate the first data packets----“*; refer to col. 5 lines 9-11---for point to point link between user and terminal equipment sites;

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use *“IEEE 802.6 bus operable to communicate the first data packets----“*; refer to col. 5 lines 9-11---for point to point link between user and terminal equipment sites;. The capability of using *IEEE 802.6 bus* is provided by combining it in access module 234 of fig. 8. The suggestion/motivation to do so would have been to provide desired characteristics of voice



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data signals for customer premises network, as set forth in user profile, which uses broadband to deliver all services and also to save bandwidth.

*Allowable Subject Matter*

8. Claims 9, 21, and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not disclose expressly the following limitations:

As recited in claims 9 and 21:

“ the packetization module receive the first data packets from a digital subscriber line multiplexer (DSLAM) and the second data packets from a cable modem termination system (CMTS) or a base station controller (BSC)”.

As recited in claim 25:

“communicating the first data packets from----IAD----DSLAM ---;  
communicating the first data packets from the DSLAM-----to the first broadband network using the first data communication protocol;

Communicating ---MTA ---CMTS----cable link;

Communicating the second data packets from the CMTS to the second broadband network---protocol”.

As recited in claim 26,

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“communicating the first data packets from---IAD---DSLAM --;  
communicating the first data packets from the DSLAM-----broadband network---  
protocol;

Communicating the second data packets from a wireless network interface unit  
(WNIU) to a base station Controller (BSC) using a wireless link; and

Communicating the second data packets from the BSC to the second broadband  
network using the second data communication protocol.

As recited by claim 27,

“Communicating ---MTA ---CMTS----cable link;

Communicating the first data packets from the CMTS to the first broadband  
network---protocol;

Communicating the second data packets from a wireless network interface unit  
(WNIU) to a base station Controller using a wireless link;

Communicating the second data packets from the BSC to the second broadband  
network using the second data communication protocol”.

### ***Response to Arguments***

9. Applicant's arguments filed 4/30/04 have been fully considered but they are not  
persuasive.

Applicant argues, “ Focsaneanu fails to disclose the ability to interface with first and  
second data communication protocols and also fails to disclose the types of broadband networks

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provided in the claims. Further, Applicant argues that Chao does not provide the ability to interface with first and second data communication protocols.

In response, it is stated that Focsaneanu discloses first and second data communication protocols, **(connection requests and grants are embodied in many different protocols, refer to col. 7 lines 60-62)** and discloses the types of broadband networks **(ATM and ISDN, refer to col. 4 lines 40-45 and col. 7 lines 15-35)** provided in the claims.

In response, further, it is stated that Chao discloses the ability to interface with first and second data communication protocols **(a unique protocol , refer to col. 17 lines 5-7). This means that protocol is unique to application requirements- different for different network.**

Applicant argues that Gerszberg does not disclose interfacing with first and second data communication protocols, because Gerszberg discloses a single type of communication capability to and from customer premises”.

In response it is stated that Focsaneanu discloses **alternate use of the local access by different services can be accomplished by negotiation, on a service –by- service, call-by-call basis between access module and CPE connector of the amount of bandwidth to be allocated. For example on a digital loop (DSL) using 2BIQ coding technology –may be allocated.**

In response, further, it is stated that Gerszberg discloses “**a separate cable modem connected intelligent terminal may provide such services ----other digital servicesdepending upon subscriber requirements and capabilities, refer to col. 2 lines 50-56”.**

**In light of above explanation, arguments by applicant are not persuasive.**

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*Conclusion*

10. Any enquiry concerning this communication should be directed to Inder Mehra whose telephone number is (703) 305-1985. The examiner can be normally reached on Monday through Friday from 8:30AM to 5:00 PM.

If attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Seema Rao , can be reached on (703) 308-5463. Any enquiry of a general nature of relating to the status of this application or processing should be directed to the group receptionist whose telephone number is (703) 305-4700.

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to (703) 872-9306.

Hand -delivered responses should be brought to Crystal Park II, 2121 Crystal drive,  
Arlington, VA, sixth floor (Receptionist).

  
Inder Mehra

June 22, 2004



DANG TON  
PRIMARY EXAMINER